Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-3.   (Canceled)

4.   (Currently Amended) ~~The image processing apparatus according to claim 3,~~ An image processing apparatus for performing an image quality improving processing of an image, comprising:

a domain block extracting section for extracting a domain block image from an original image in the unit of a first block unit;

a range block extracting section for extracting a range block image from the original image in the unit of a second block unit which is larger than the first block unit with respect to the domain block image;

a reduced range block forming section for reducing the extracted range block image to the size of the first block unit;

an improved domain block forming section for performing a pixel value conversion with respect to the reduced range block image formed by the reduced range block forming section, and for outputting the pixel-value-converted reduced range block image as an improved domain block image;

a similarity degree judging section for judging a similarity degree between the domain block image and the reduced range block image by the reduced range block forming section, the improved domain block forming section performs the pixel value conversion based upon the similarity degree obtained by the similarity degree judging section; and

a domain block classifying section for classifying a sort of the domain block image extracted by the domain block extracting section,

<u>wherein the domain block image other than the domain block image which has</u>

<u>been classified to a previously determined sort is directly outputted as the improved domain</u>

<u>block image, and</u>

~~wherein~~ the domain block classifying section classifies the domain block

image to a flat portion, a step edge portion, a noise portion, and a texture portion based upon

both standard deviation and a concave/convex degree of the domain block image.

5.   (Original) The image processing apparatus according to claim 4, wherein

the range block extracting section extracts a range block image from the original image in the

second block unit larger than the first block unit with respect to the domain block image

which has been classified to the step edge portion by the domain block classifying section.

6.   (Original) The image processing apparatus according to claim 4, wherein

the range block extracting section extracts a range block image from the original image in the

second block unit larger than the first block unit with respect to the domain block image

which has been classified to the noise portion by the domain block classifying section.

7.   (Original) The image processing apparatus according to claim 4, wherein

the range block extracting section extracts a range block image from the original image in the

second block unit larger than the first block unit with respect to the domain block image

which has been classified to the step edge portion, or the noise portion by the domain block

classifying section.

8-11.   (Canceled)

12.   (Currently Amended) ~~The image processing apparatus according to claim 1,~~

~~further comprising~~ <u>An image processing apparatus for performing an image quality improving</u>

<u>processing of an image, comprising:</u>

<u>a domain block extracting section for extracting a domain block image from an</u>

<u>original image in the unit of a first block unit;</u>

a range block extracting section for extracting a range block image from the original image in the unit of a second block unit which is larger than the first block unit with respect to the domain block image;

a reduced range block forming section for reducing the extracted range block image to the size of the first block unit;

an improved domain block forming section for performing a pixel value conversion with respect to the reduced range block image formed by the reduced range block forming section, and for outputting the pixel-value-converted reduced range block image as an improved domain block image;

a similarity degree judging section for judging a similarity degree between the domain block image and the reduced range block image by the reduced range block forming section, the improved domain block forming section performs the pixel value conversion based upon the similarity degree obtained by the similarity degree judging section; and

an edge emphasizing section for executing an edge enhancement processing with respect to the improved domain block image based upon both a relationship between a maximum value and a minimum value of the pixel values within the improved domain block images, and an edge degree of the improved domain block image.

13. (Previously Presented) The image processing apparatus according to claim 4, further comprising an edge emphasizing section for executing an edge enhancement processing with respect to the improved domain block image based upon both a relationship between a maximum value and a minimum value of the pixel values within the improved domain block images, and an edge degree of the improved domain block image,

wherein the edge emphasizing section executes the edge enhancement processing only for the improved domain block image which corresponds to the domain block image classified to the step edge portion by the domain block classifying section.

14.   (Original) The image processing apparatus according to claim 12, wherein the edge emphasizing section calculates an averaged pixel value as to both the maximum pixel value and the minimum pixel value within the improved domain block image, converts a pixel value larger than the averaged pixel value into a larger pixel value in response to a distance between the own pixel value and the averaged pixel value, and also converts a pixel value smaller than the averaged pixel value into a smaller pixel value in response to a distance between the own pixel value and the averaged pixel value in accordance with a strength of an edge enhancement.

15.   (Original) The image processing apparatus according to claim 14, wherein the strength of the edge enhancement employed in the edge emphasizing section is set in such a manner that when a standard deviation value of the pixel values contained in the domain block image is small, the strength is made strong, whereas when a standard deviation value of the pixel values is large, the strength is made weak.

16-19. (Canceled)

20.   (Currently Amended) ~~The image processing method according to claim 19,~~ An image processing method for performing an image quality improving processing of an image, comprising:

extracting a domain block image from an original image in the unit of a first block unit;

extracting a range block image from the original image in the unit of a second block unit larger than the first block unit with respect to the domain block image;

reducing a size of the extracted range block image to the size of the first block unit;

judging a similarity degree between the reduced range block image and the domain block image;

forming an improved domain block image based upon a result obtained by converting pixel values as to the reduced range block image based upon the similarity degree.

classifying a sort of the domain block image extracted from the original image; and

outputting the domain block image other than the domain block image which has been classified to a previously-determined sort as the improved domain block image,

wherein the classifying of a sort of the domain block image classifies the domain block image to a flat portion, a step edge portion, a noise portion, and a texture portion based upon both standard deviation and a concave/convex degree of the domain block image.

21.   (Previously Presented) The image processing method according to claim 20, wherein the extracting of the range block image is performed when the domain block image is classified to a step edge portion.

22.   (Previously Presented) The image processing method according to claim 20, wherein the extracting of the range block image is performed when the domain block image is classified to a noise portion.

23.   (Previously Presented) The image processing method according to claim 20, wherein the extracting of the range block image is performed when the domain block image is classified to one of a step edge portion and a noise portion.

24-27. (Canceled)

28.   (Currently Amended) ~~The image processing method according to claim 18, further comprising~~ An image processing method for performing an image quality improving processing of an image, comprising:

extracting a domain block image from an original image in the unit of a first block unit;

extracting a range block image from the original image in the unit of a second block unit larger than the first block unit with respect to the domain block image;

reducing a size of the extracted range block image to the size of the first block unit;

judging a similarity degree between the reduced range block image and the domain block image;

forming an improved domain block image based upon a result obtained by converting pixel values as to the reduced range block image based upon the similarity degree; and

performing an edge enhancement processing with respect to the improved domain block image based upon both a relationship between a maximum value and a minimum value of the pixel values within the improved domain block images, and an edge degree of the improved domain block image.

29.   (Previously Presented) The image processing method according to claim 20, wherein when the sort of the domain block image is classified to the step edge portion, an edge enhancement processing is performed with respect to the improved domain block image based upon both a relationship between a maximum value and a minimum value of the pixel values within the improved domain block images, and an edge degree of the improved domain block image only for the improved domain block image which corresponds to the domain block image.

30.   (Previously Presented) The image processing method according to claim 28, wherein the edge enhancement processing calculates an averaged pixel value as to both the maximum pixel value and the minimum pixel value within the improved domain block image, converts a pixel value larger than the averaged pixel value into a larger pixel value in response to a distance between the own pixel value and the averaged pixel value, and also

converts a pixel value smaller than the averaged pixel value into a smaller pixel value in response to a distance between the own pixel value and the averaged pixel value in accordance with a strength of an edge enhancement.

31.   (Previously Presented) The image processing method according to claim 30, wherein the strength of the edge enhancement employed in the edge enhancement processing is set in such a manner that when a standard deviation value of the pixel values contained in the domain block image is small, the strength is made strong, whereas when a standard deviation value of the pixel values is large, the strength is made weak.

32-35. (Canceled)